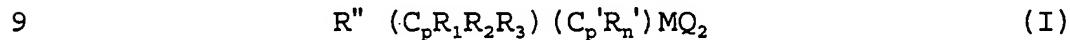


WHAT IS CLAIMED IS:

1. Use of isotactic polypropylene homopolymers or
2 copolymers in processes in which the polypropylene solidifies
3 from a melt, wherein for enhanced speed of solidification of
4 the polypropylene the polypropylene has a melt temperature and
5 a crystallisation temperature not more than 50°C less than the
6 melt temperature resulting from the polypropylene having been
7 produced using a metallocene catalyst component having the
8 general formula:



10 wherein C_p is a substituted cyclopentadienyl ring; C_p' is a
11 substituted or unsubstituted fluorenyl ring; R'' is a structural
12 bridge imparting stereorrigidity to the component; R_1 is a
13 substituent on the cyclopentadienyl ring which is distal to the
14 bridge, which distal substituent comprises a bulky group of the
15 formula XR^*_a in which X is chosen from Group IVA, and when $a=3$
16 each R^* is the same or different and chosen from hydrogen or
17 hydrocarbyl of from 1 to 20 carbon atoms, or when $a=2$ one R^* is
18 chosen from hydrogen or hydrocarbyl of from 1 to 20 carbon atoms
19 and the other different R^* is chosen from a substituted or
20 unsubstituted cycloalkyl where X is a carbon atom in the
cycloalkyl ring, R_2 is a substituent on the cyclopentadienyl ring

which is proximal to the bridge and positioned non-vicinal to the
2 distal substituent and is hydrogen or of the formula YR#, in
3 which Y is chosen from Group IVA, and each R# is the same or
4 different and chosen from hydrogen or hydrocarbyl of 1 to 7
5 carbon atoms, R₃ is a substituent on the cyclopentadienyl ring
6 which is proximal to the bridge and is a hydrogen atom or is of
7 the formula ZR\$, in which Z is chosen from Group IVA, and each R\$
8 is the same or different and chosen from hydrogen or hydrocarbyl
9 of 1 to 7 carbon atoms, each R'_n is the same or different and is
10 hydrocarbyl having 1 to 20 carbon atoms in which 0≤n≤8; M is a
11 Group IVB transition metal or vanadium and each Q is hydrocarbyl
12 having 1 to 20 carbon atoms or is a halogen.

2. Use according to claim 1, wherein R₁ is a methyl-
2 cyclohexyl group.

3. Use according to claim 1 wherein R₁ is a tertiary butyl
2 group.

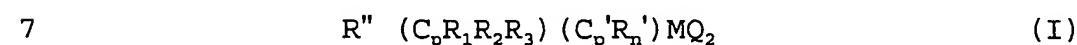
4. Use according to claim 2 or claim 3 wherein R₂ is a
2 methyl group.

5. Use according to claim 2 or claim 3 wherein R₂ is
2 hydrogen.

6. Use according to any foregoing claim wherein each R' is
2 hydrogen.

3 7. Use according to any foregoing claim wherein Y is
4 carbon.

8. A process for producing an isotactic homopolymer of
2 propylene having a melt temperature of from 139 to 144°C and a
3 difference between the melt temperature and the crystallisation
4 temperature of not more than 50°C, the process comprising
5 homopolymerising propylene in the presence of a metallocene
6 catalyst of general formula:



8 wherein C_p is a substituted cyclopentadienyl ring; C_p' is a
9 substituted or unsubstituted fluorenyl ring; R'' is a structural
10 bridge imparting stereorigidity to the component; R_1 is a
11 substituent on the cyclopentadienyl ring which is distal to the
12 bridge, which distal substituent comprises a bulky group of the
13 formula XR_a^* in which X is chosen from Group IVA, a=2, and one R^*
14 is chosen from hydrogen or hydrocarbyl of from 1 to 20 carbon
15 atoms and the other different R^* is chosen from a substituted or
16 unsubstituted cycloalkyl where X is a carbon atom in the
17 cycloalkyl ring, R_2 is a substituent on the cyclopentadienyl ring

which is proximal to the bridge and positioned non-vicinal to the
2 distal substituent and is of the formula YR#, in which Y is
3 chosen from Group IVA, and each R# is the same or different and
4 chosen from hydrogen or hydrocarbyl of 1 to 7 carbon atoms, R₃ is
5 a substituent on the cyclopentadienyl ring which is proximal to
6 the bridge and is a hydrogen atom or is of the formula ZR\$, in
7 which Z is chosen from Group IVA, and each R\$ is the same or
8 different and chosen from hydrogen or hydrocarbyl of 1 to 7
9 carbon atoms, each R'_n is the same or different and is hydrocarbyl
10 having 1 to 20 carbon atoms in which 0≤n≤8; M is a Group IVB
11 transition metal or vanadium and each Q is hydrocarbyl having 1
12 to 20 carbon atoms or is a halogen.

9. A process according to claim 8 wherein R₁ is a methyl-
2 cyclohexyl group.

10. A process according to claim 9 wherein R₂ is a methyl
2 group.